

CLAIM AMENDMENTS

Claim 1 (Currently Amended)

A radiation image converting panel comprising a support having thereon a stimulable phosphor layer containing a polymer and a stimulable phosphor produced by ~~sublimation of a CsBr:Eu precursor~~ the method of claim 7, the stimulable phosphor layer having a thickness of 50  $\mu\text{m}$  to 1 mm,

wherein the stimulable phosphor has a spherical shape.

Claim 2 (Original)

The radiation image converting panel of claim 1,  
wherein the stimulable phosphor has an average particle diameter of 0.1 to 5  $\mu\text{m}$ .

Claim 3 (Original)

The radiation image converting panel of claim 1,  
wherein the stimulable phosphor layer comprises Cs atom in an amount of not less than 10% based on the total weight of the layer.

Claim 4 (Original)

The radiation image converting panel of claim 1, wherein the stimulable phosphor layer comprises:

(i) CsBr; and

(ii) Eu and an impurity,

an amount of Eu and the impurity being 100 to 1000 ppm by weight based on the total weight of CsBr.

Claim 5 (Original)

The radiation image converting panel of claim 1, wherein the stimulable phosphor is represented by Formula (1):

Formula (1)



wherein  $M^1$  is at least one alkaline metal atom selected from the group consisting of Li, Na, K, Rb, and ~~Cs~~, Cs;  $M^2$  is at least one divalent metal atom selected from the group consisting of Be, Mg, Ca, Sr, Ba, Zn, Cd, Cu, and Ni;  $M^3$  is at least one trivalent metal atom selected from the group consisting of Sc, Y, La, Ce, Pr, Nd, Pm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu, Al, Ga and In; X, X', and X'' each represents at least one halogen atom selected from the group consisting of F, Cl, Br, and I; A represents at least one metal atom selected from the group consisting of Eu, Tb, In, Ce, Tm, Dy, Pr, Ho, Nd, Yb, Er, Gd, Lu, Sm, Y, Tl, Na, Ag, Cu, and Mg; and a, b, and e each are

numbers satisfying the conditions of  $0 \leq a < 0.5$ ,  $0 \leq b < 0.5$ , and  $0 < e \leq 0.2$ .

Claim 6 (Original)

The radiation image converting panel of claim 1,  
wherein the stimulable phosphor has a peak at (2,0,2) as a maximum peak measured with X-ray diffraction.

Claim 7 (Currently Amended)

A method for producing ~~the a~~ stimulable phosphor ~~of claim~~ 1, comprising the steps of:

- (i) forming a CsBr:Eu precursor with an emulsified layer method by mixing:
  - (a) an aqueous solution containing Cs ions, Br ions and Eu ions;
  - (b) an organic solvent having a different solubility for the Cs ions, the Br ions and the Eu ions; and
  - (c) a surface active agent;
- (ii) isolating the CsBr:Eu precursor, and
- (iii) burning the CsBr:Eu precursor to obtain the stimulable phosphor.

Claim 8 (Currently Amended)

A method for producing ~~the a~~ stimulable phosphor ~~of claim~~  
‡, comprising the steps of:

- (i) forming an aqueous phase containing Cs ions, Br ions and Eu ions;
- (ii) adding an organic phase containing an organic solvent and a surface active agent to the aqueous phase so as to obtain a CsBr:Eu precursor;
- (iii) isolating the CsBr:Eu precursor, and
- (iv) burning the CsBr:Eu precursor to obtain the stimulable phosphor.

Claim 9 (Currently Amended)

A ~~The~~ method for producing the stimulable phosphor of ~~claim~~  
‡ claim 7, comprising a step of:

heating the stimulable phosphor between 400 to 700 °C under an atmospheric pressure.

Claim 10 (Currently Amended)

A method for producing ~~the a~~ radiation image converting panel ~~of claim 1~~, comprising the steps of:

- (i) mixing ~~a~~ the stimulable phosphor produced by the method of claim 7 and a polymer to obtain a coating mixture;
- (ii) coating the coating mixture on a support to obtain a coated layer; and
- (iii) heating the coated layer under an inactive gas atmosphere so as to dry the coated layer.

Claim 11 (New)

A radiation image converting panel comprising a support having thereon a stimulable phosphor layer containing a polymer and a stimulable phosphor produced by the method of claim 8, the stimulable phosphor layer having a thickness of 50  $\mu\text{m}$  to 1 mm, wherein the stimulable phosphor has a spherical shape.

Claim 12 (New)

The radiation image converting panel of claim 11, wherein the stimulable phosphor has an average particle diameter of 0.1 to 5  $\mu\text{m}$ .

Claim 13 (New)

The radiation image converting panel of claim 11,  
wherein the stimulable phosphor layer comprises Cs atom in  
an amount of not less than 10% based on the total weight of the  
layer.

Claim 14 (New)

The radiation image converting panel of claim 11, wherein  
the stimulable phosphor layer comprises:

(i) CsBr; and

(ii) Eu and an impurity,

an amount of Eu and the impurity being 100 to 1000 ppm by  
weight based on the total weight of CsBr.

Claim 15 (New)

The radiation image converting panel of claim 11, wherein  
the stimulable phosphor is represented by Formula (1):

Formula (1)



wherein  $M^1$  is at least one alkaline metal atom selected from  
the group consisting of Li, Na, K, Rb, and Cs;  $M^2$  is at least one  
divalent metal atom selected from the group consisting of Be,  
Mg, Ca, Sr, Ba, Zn, Cd, Cu, and Ni;  $M^3$  is at least one trivalent  
metal atom selected from the group consisting of Sc, Y, La, Ce,

Pr, Nd, Pm, Sm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu, Al, Ga and In; X, X', and X'' each represents at least one halogen atom selected from the group consisting of F, Cl, Br, and I; A represents at least one metal atom selected from the group consisting of Eu, Tb, In, Ce, Tm, Dy, Pr, Ho, Nd, Yb, Er, Gd, Lu, Sm, Y, Tl, Na, Ag, Cu, and Mg; and a, b, and e each are numbers satisfying the conditions of  $0 \leq a < 0.5$ ,  $0 \leq b < 0.5$ , and  $0 < e \leq 0.2$ .

Claim 16 (New)

The radiation image converting panel of claim 11, wherein the stimulable phosphor has a peak at (2,0,2) as a maximum peak measured with X-ray diffraction.

Claim 17 (New)

The method for producing the stimulable phosphor of claim 8, comprising a step of:

heating the stimulable phosphor between 400 to 700 °C under an atmospheric pressure.

Claim 18 (New)

A method for producing a radiation image converting panel, comprising the steps of:

- (i) mixing the stimulable phosphor produced by the method of claim 8 and a polymer to obtain a coating mixture;
- (ii) coating the coating mixture on a support to obtain a coated layer; and
- (iii) heating the coated layer under an inactive gas atmosphere so as to dry the coated layer.